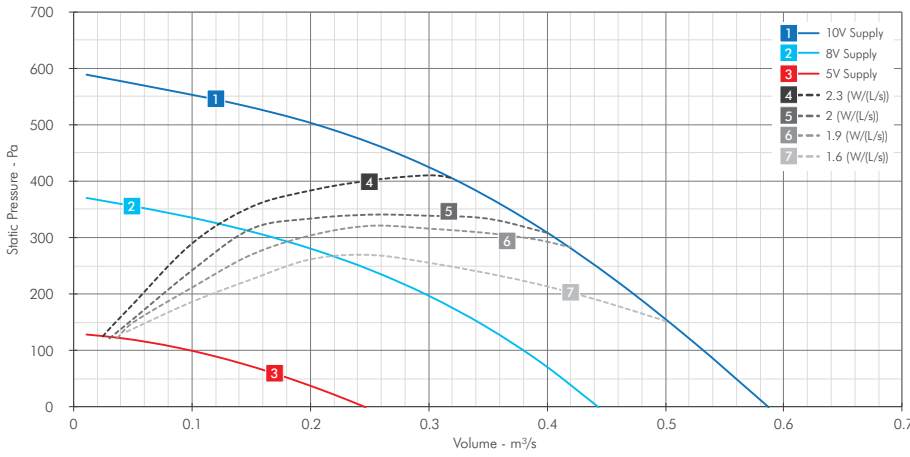


PREMA540

The PREMA540 unit is optimised for any commercial building services application covering an airflow envelope of 0.145 – 0.546 m³/s at 75Pa ESP (low pressure duct systems). Overall unit SFP calculated with ISO ePM₁ 55% (F7) / ISO ePM₁₀ 55% (M5) filters under clean filter conditions.



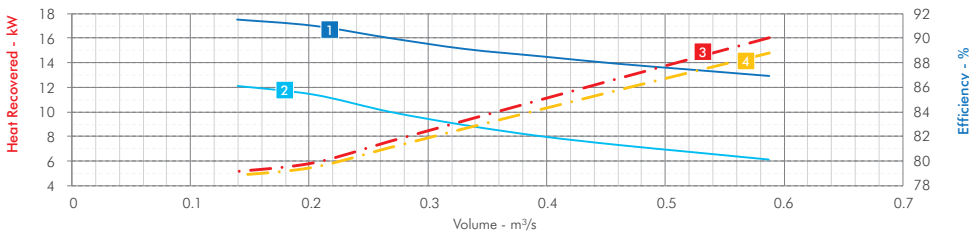
Airflow Performance Curve



Key Features

- Heat / Coolth Recovery
- Dual Condensate Tray
- Low energy consumption and quiet EC fans
- Counterflow heat exchanger offering high thermal energy recovery
- 100% motorised bypass damper
- Fine particulate filters fitted as standard
- ErP 2018 compliant
- Demand control options with BMS, CO₂ or constant pressure sensors
- Airflow balancing allows individual fan control and ensures a balanced supply and extract

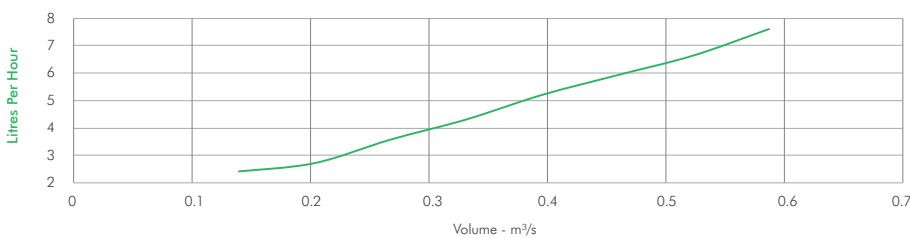
Heat Exchanger Efficiency & Energy Recovery



- 1 Eff Wet
- 2 Eff Dry
- 3 kW Wet
- 4 kW Dry

Dry performance based on EN 308
Wet performance based on -5°C supply 95% RH, +21°C extract 50% RH

Condensate Rate



- Condensate

Wet Performance based on -5°C supply 95% RH, +21°C extract 50% RH

Performance Data

Control Voltage	Speed r/min	Airflow SFP	Airflow m ³ /s @ Static Pressure Pa													Input kW	Peak Amps
			0	25	50	75	100	150	200	250	300	350	400	500			
10V	2016	m ³ / s	0.587	0.573	0.560	0.546	0.532	0.503	0.473	0.441	0.407	0.368	0.325	0.206	0.804	3.55	
		W / (L/s)	1.37	1.40	1.43	1.46	1.50	1.58	1.68	1.78	1.90	2.04	2.19	2.82			
8V	1599	m ³ / s	0.443	0.428	0.413	0.397	0.380	0.342	0.297	0.241	0.168	0.064	-	-	0.417	1.85	
		W / (L/s)	0.94	0.97	1.01	1.04	1.09	1.19	1.33	1.52	1.90	3.69	-	-			
5V	955	m ³ / s	0.246	0.216	0.183	0.145	0.098	-	-	-	-	-	-	-	0.109	0.55	
		W / (L/s)	0.44	0.50	0.57	0.68	0.89	-	-	-	-	-	-	-			

Specific Fan Power figures (W / (L/s)) are total for both fans running under clean filter conditions (ref. the building regulations).

Data provided is at standard air density of 1.2 kg/m³. Air Performance: ISO 5801:2007.

Refer to Air Design Ecodesign document for data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU:BVU. Measurement category used to determine energy efficiency: D.

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

Sound Data

Control Voltage	Speed r/min	Location	Sound Power Level dBW @ Octave Band Hz									Total dB	dBA @ 3m
			63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz			
10V	2016	Intake (T21)	77	76	76	69	62	57	55	51	81	51	
		Supply (T22)	71	62	55	56	49	40	29	25	72	36	
		Extract (T11)	79	79	77	71	63	58	56	51	84	52	
		Exhaust (T12)	74	65	52	51	47	37	29	26	75	34	
		Break Out	67	63	66	52	37	32	32	22	70	38	
8V	1599	Intake (T21)	72	75	67	63	55	51	48	46	77	44	
		Supply (T22)	66	57	49	46	43	34	26	23	67	28	
		Extract (T11)	74	76	68	64	56	52	49	46	79	45	
		Exhaust (T12)	67	61	47	44	41	32	26	24	68	28	
		Break Out	63	61	58	43	31	27	24	19	66	31	
5V	955	Intake (T21)	70	66	56	49	43	36	34	29	72	33	
		Supply (T22)	58	52	37	33	30	24	22	20	59	19	
		Extract (T11)	71	67	57	49	43	36	33	30	73	34	
		Exhaust (T12)	59	53	34	30	28	23	21	19	60	19	
		Break Out	55	50	47	29	19	15	16	16	57	20	

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only. Tests and preparation of the sound data have been carried out in accordance with BS 848-2:1985 (ducted) and **independently tested** to ISO 3741:2010 (breakout).

The Sound Power Level Spectra are in dB re-1pW.

Dimensional Data

Unit Size	L	W	H*	D	E	Weight kg
PREMA540	2066	1496	474	355	750	241

All dimensions are expressed in mm.

*Overall height includes unit mounted condensate drain tray.

Ordering Stock Codes

Product Stock Code	Product Description
7835824-540	PREMA Size 540
7835824-540CP	PREMA Size 540 Constant Pressure Control

